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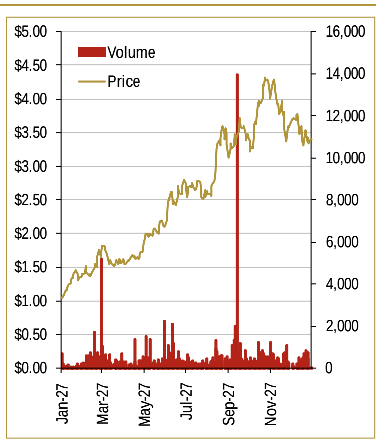
Medusa Mining Limited
(MLL-TSX C$3.05; MML-ASX A$3.23)

Mining & Minerals

Quarterly Activities Update – Rapid Gold Production Growth with Upside

Recommendation	BUY
Target	A$5.00
Return	54.8%

COMPANY DATA				
Shares Outstanding (mill)				170.4
Market Capitalization (mill)				A$550.3
Net Debt (mill)				(A$29.3)
Enterprise Value (mill)				U$466.8
52-Week Range				A$1.05 - A$4.40
YE Jun 30	2008	2009	2010e	2011e
Gold Production (oz)	19,009	47,869	88,995	104,950
Total Cash Costs (US$/oz)	U$248	U$213	U$193	U$199
Revenue (mill)	A$17.6	A$57.0	A$95.7	A$112.8
EBITDA (mill)	A$4.6	A$40.4	A$58.4	A$66.7
Net Earnings (mill)	(A$1.3)	A$38.1	A$52.0	A$61.0
per share	(A$0.01)	A$0.25	A$0.25	A$0.36
Oper. Cash Flow (mill)	A$7.2	A$39.7	A$59.4	A$69.1
per share	A$0.05	A$0.24	A$0.35	A$0.41
Price/Cash Flow	65.1x	13.7x	9.3x	8.0x
KEY PERSONNEL				
Managing Director		Geoffrey Davis		
Finance Director		Roy Daniel		



Source: Capital IQ

- **On track for 86% gold production growth.**
  FY2010 gold production growth of 86% to 89,000 oz; second project could boost output to 300,000 oz/yr.
- **Phase 2 mill commissioning has commenced.**
  Co-O mine expansion plans on track. Mine and mill construction is complete.
- **Very low cost at US$190/oz protects downside.**
  FQ2/10 reported 21,108 oz at US$184/oz, making it one of the world's lowest cost gold producers.
- **Recommended as Buy with target of A$5.00/sh.**
  Trading at discount to peers on P/CF (9.3x P/10e versus 15.4x); target based on 1.3x P/NAV of A$3.96 per share.

Company Profile

Medusa Mining operates the Co-O high-grade, underground gold mine in the southern Philippines. The expansion of the low-cost mine is targeted for 89,000 oz at US$190/oz produced in FY2010 from 47,869 oz at US$213/oz produced in FY2009. Large land package along the East Mindanao Ridge, also hosts the advanced Bananghilig gold project, which could triple the company's annual gold production in coming years. Regional exploration has targeted copper porphyry deposits (Lingig) as well as vein and disseminated gold deposits. Well-financed, with no long-term debt. www.medusamining.co.au.

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Investment Summary

Growing low cost gold producer. Medusa Mining is an Australian mining company that has operated the Co-O high-grade, underground gold mine in the Mindanao area of the southern Philippines for the last three years. The operation is one of the world's lowest cost mines due partly to the favorable infrastructure and low country costs. The mine and mill expansion are nearly complete allowing for a production rate of 100,000 oz/year. Exploration potential is excellent on the 820 sq km land package, with a well-financed and growing pipeline of projects. The Bananghilig gold project has the potential to triple annual output within the next few years and the well-located Lingig copper project is being systematically advanced.

Co-O Gold Mine Update

Record gold production and upward forecast revisions. Gold production of 21,108 ozs in the three months ended December 31/09 (versus 18,054 ozs in the previous quarter) at an average grade of 18.68 g/t gold and average cash cost of US$184 per oz. Phase 2 expansion plans remain on schedule and drove the 17% production growth over the last quarter. Forecast gold production for the fiscal year June 30, 2010 has been revised upwards from 86,000 ozs to 89,000 ozs mainly due to higher grade (18.68 g/t versus 14.78 g/t in the September 2009 quarter). Average cash cost of US$190 per oz came in lower than the November 2010 forecast of US$200 per oz.

Phase 2 mine expansion is complete, and the mine can now produce at the rate of approximately 750 tpd, or 100,000 ozs annually. Mill expansion has also been completed, and commissioning has commenced. In addition, construction of a new eight-year life tailings dam is progressing and due for completion in June 2010, while several options are under evaluation to replace the rural power line currently in use at the mill site.

Diamond drilling at the Co-O mine has continued since the last resource model update on July 1, 2009 and is focused on extending the Co-O vein system. Fifty-two drill holes have been completed, of which many are not included in the resource estimate but will be added as confidence levels increase. In addition, regional drilling with up to three surface rigs around the Co-O mine are testing new veins.

Re-Interpretation of Resource Model

Slight revision to Co-O mine resource model. The Company has completed a re-interpretation to correct for inconsistencies between previous drillhole-based interpretations and the ongoing development on Level 5 from the Agsao shaft. The re-interpretation has marginally decreased the Inferred Resources but maintained the Indicated Resource taking into account production and stockpiles. Future resource updates will be done annually at fiscal year-end.

Figure 1: Updated Resource Summary

	Proven/Probable Reserves			Meas/Indic Resource			Inferred Resource		
Mine/Project	(000 t)	(g/t)	(000 oz)	(000 t)	(g/t)	(000 oz)	(000 t)	(g/t)	(000 oz)
Co-O	1,041	14.90	500	1,450	12.30	580	2,290	9.00	660
Bananghilig	-	-	-	-	-	-	15,000	1.30	650
TOTAL	1,041	14.90	500	1,450	12.30	580	17,290	9.00	1,310

Source: Medusa Mining.

Bananghilig and Lingig Project Updates

Systematic drilling to advance exploration projects. Planning is underway to commence a pre-feasibility study drilling campaign in July 2010 at the Bananghilig gold project. With potential production of about 200,000 oz per year, this project has the potential to triple the Company's annual production levels within the next few years.

Drilling with three surface rigs continues at the Lingig copper project. The most recent results were announced on October 12, 2009.

Other News

New TSX listing slow to capture market share. Medusa shares were listed on the Toronto Stock Exchange at market opening on November 27, 2009. Liquidity on the TSX is limited, with most trading remaining on the AIM and ASX. Specifically, since the TSX listing, volume has been 65.6% ASX, 30.9% AIM, and 3.5% TSX.

Board Resignation. Mr. Kevin Tomlinson has resigned as Non-Executive Chairman of the Company as of January 13, 2010 to attend to increased work commitments.

Valuation Summary

Recommended as Buy with a target price of A$5.00 per share. Based on strong cash flow generation, no debt and excellent exploration upside, a 1.3x market multiple is applied to the estimated net asset value of A$3.96 per share. Good gold price sensitivity (15% change in cash flow per share with every 10% change in the gold price) in the current strong market is favourable for additional upside, while the low cash cost base is good support for the shares on the downside. Resource expansion is anticipated which should lead to further production growth in coming years.

Strong cash flow generation and gold price sensitivity. Medusa Mining shares are currently trading at 9.3x FY2010 cash flow of A$0.35 per share. This compares to peer companies now at 15.4x, well above the high end of the normalized 12-14x range. Applying current peer multiples, and based on FY2010e cash flow, Medusa shares could trade at a normalized A$4.20-$4.90 per share, and taking one year forward, using the twelve months ended June 30, 2011, the shares could trade at A$4.92-$5.74 per share.

Figure 2: Net Asset Value Summary

	Potential Market Value	
	A$ 000	A$/sh
Co-O Mine (NPV 3%)	$546,447	$3.21
Bananghlig Gold Project	$72,545	$0.42
Lingig Copper Project	$27,902	$0.16
Working Capital	$29,319	$0.17
Total Net Asset Value	$676,213	$3.96

Source: Sandfire Securities Inc.

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Figure 3: Selected Comparable Companies – Consensus Estimates

	Symbol	Price (C$)	Shares (000)	Market Capital. (C$000)	EV (US$000)	Prv/Prb Reserves (000 Oz)	Prv/Prb Reserves (g/t)	Meas/Indic Resource (000 Oz)	Inferred Resource (000 Oz)	EV/oz Reserve	EV/oz Minlzn*
Allied Nevada Gold	ANV-T	$13.46	71,263	$959,203	$822,624	1,143	0.55	8,177	7,497	$720	$54
Andean Resources (AU)	AND-T	$2.33	461,346	$1,074,937	$1,040,858	1,472	6.40	296	235	$707	$532
Aurizon Mines	ARZ-T	$4.16	158,938	$661,181	$598,931	956	7.80	2,402	2,060	$626	$120
CGA Mining (AU)	CGA-T	$2.10	284,287	$597,003	$674,898	3,032	1.02	1,789	3,269	$223	$91
Kirkland Lake Gold	KGI-T	$7.37	63,119	$465,186	$440,387	1,332	18.79	1,008	822	$331	$147
Lake Shore Gold	LSG-T	$3.40	361,200	$1,228,080	$1,218,159	826	7.59	403	703	$1,475	$680
Medusa Mining**	MML-A	A$3.23	168,692	$544,875	$493,437	500	14.90	580	660	$987	$307
Minefinders Corp.	MFL-T	$10.64	66,317	$705,613	$732,025	2,444	0.77	3,498	708	$300	$112
Perseus Mining (AU)	PRU-A	$1.83	357,962	$653,281	$524,305	2,141	1.20	1,031	2,132	$245	$107
San Gold Corp.	SGR-V	$3.40	265,496	$902,686	$910,077	334	8.90	69	1,198	$2,727	$669
				Average:	$745,570						

	Production (000 oz) 2008	Production (000 oz) 2009e	Production (000 oz) 2010e	Costs (US$/oz) 2009e	Costs (US$/oz) 2010e	CFPS 2010e	CFPS 2011e	P/CF 2010e	P/CF 2011e	Location
Allied Nevada Gold	-	48	100	$450	$455	$0.81	$1.09	16.7 x	12.3 x	Nevada
Andean Resources (AU)	-	-	-	-	-	NA	NA	NA	NA	Argentina
Aurizon Mines	159	153	161	$415	$410	$0.45	$0.63	9.3 x	6.6 x	Quebec
CGA Mining (AU)	13	75	200	$575	$350	$0.32	$0.39	6.6 x	5.4 x	Philippines
Kirkland Lake Gold	40	95	139	$513	$392	$0.51	$0.90	14.4 x	8.2 x	Ontario
Lake Shore Gold	-	-	-	-	-	$0.08	$0.34	43.0 x	10.0 x	Ontario
Medusa Mining**	48	89	105	$193	$199	$0.35	$0.41	9.3 x	8.0 x	Philippines
Minefinders Corp.	10	128	170	$468	$460	$1.26	$1.55	8.5 x	6.9 x	Mexico
Perseus Mining (AU)	-	-	-	-	-	NA	NA	NA	NA	Ghana
San Gold Corp.	12	20	109	$467	$378	$0.22	$0.38	15.7 x	8.9 x	Manitoba
							Average:	15.4 x	8.3 x	

Source: Company Reports, Capital IQ, Sandfire Securities Inc.
** Mineralized material = measured + indicated + 80% inferred resource.*
*** Sandfire Securities Inc. estimates.*

Operating and Financial Summary

FY June 30	2008	2009	2010e	2011e
Operations				
Ore Milled (tonnes)	69,834	116,451	222,120	270,000
Gold Grade (g/t)	10.42	13.30	13.40	13.00
Recovery (%)	81%	93%	93%	93%
Gold (Ounces)	19,009	47,869	88,995	104,950
Total Cash Costs (US$/oz)	$248	$213	$193	$199
Est. Realized Gold Price (US$/oz)	$685	$880	$1,000	$1,000
Earnings (A$000)				
Revenue	$17,630	$57,018	$95,694	$112,849
Operating Costs	($10,067)	($17,339)	($18,510)	($22,500)
General & Admin	($3,307)	($2,352)	($4,785)	($5,642)
Exploration	($572)	($81)	($14,000)	($18,000)
EBITDA	$4,586	$40,369	$58,399	$66,707
Deprec., Amort.	($3,637)	($4,789)	($7,401)	($8,187)
Interest Income/(Expense)	$69	$234	$988	$2,440
Taxes	($2,366)	$2,291	$0	$0
Net Earnings	($1,347)	$38,105	$51,986	$60,960
Per Share	($0.01)	$0.25	$0.25	$0.36
Cash Flow (A$000)				
Operating Cash Flow	$7,200	$39,719	$59,387	$69,147
Per Share	$0.05	$0.24	$0.35	$0.41
Capital Expenditures	($17,154)	($35,745)	($11,000)	($11,000)
Total Financing	($5,069)	$26,841	$0	$0
Other	($421)	($2,710)	$0	$0
Net Cash Flow	($15,334)	$28,105	$48,387	$58,147

Source: Company Reports, Sandfire Securities Inc.

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Research Disclosure

Issuer	*Applicable Disclosures*
Medusa Mining Limited (MML-ASX, AIM, TSX)	*4, 6, 7*

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